

WHAT IS CLAIMED IS:

1. A method for the preparation of naphthalene dicarboxylic acid by oxidizing dimethylnaphthalene with oxygen in air in the presence of acetic acid solvent using the metal catalysts of cobalt and manganese, and using
5 bromine as a reaction initiator, wherein the temperature of said oxidation reaction is 155 to 180 °C.

2. The method for the preparation of naphthalene dicarboxylic acid of claim 1, wherein said naphthalene dicarboxylic acid is 2,6-naphthalene dicarboxylic acid.

10 3. The method for the preparation of naphthalene dicarboxylic acid of claim 1, wherein the concentration of said metal catalysts of cobalt and manganese is 1000 ppm to 6000 ppm in acetic acid.

4. The method for the preparation of naphthalene dicarboxylic acid of claim 1, wherein the molar ratio of said metal catalysts of cobalt and
15 manganese is 2:1 to 25:1.

5. The method for the preparation of naphthalene dicarboxylic acid of claim 1, wherein the molar ratio of said bromine to the metal catalysts of cobalt and manganese is 0.1:1 to 0.8:1.

6. The method for the preparation of naphthalene dicarboxylic acid
20 of claim 1, wherein the residence time of said acetic acid and the produced naphthalene dicarboxylic acid in the reactor is 30 to 120 min.

7. The method for the preparation of naphthalene dicarboxylic acid of claim 1, wherein the weight ratio of said air to dimethylnaphthalene is 4:1 to 15:1, and nitrogen, an off-gas where the concentration of oxygen is lowered after oxidation reaction, or a mixture thereof is charged into the
5 upper portion of the reactor.